

AMENDMENTS TO THE CLAIMS

1[[]]. (Currently amended) An electric lamp, comprising:

- a) a lamp envelope having an inner surface;
- b) means within the lamp envelope for generating ultraviolet radiation;
- c) a layer of a luminescent material adjacent the inner surface of the lamp envelope for generating visible light when impinged by said ultraviolet radiation; and
- d) ~~a base-coat~~ a reflective layer, said reflective layer being disposed between said inner surface of said lamp envelope and said layer of luminescent material, for reflecting ultraviolet radiation which has passed through said layer of luminescent material back into said luminescent material for increasing the visible light output of said luminescent material, said ~~base-coat~~ reflective layer comprising consisting essentially of a mixture of particulate non-fluorescent oxidic material ~~with and~~ a getter material ~~on its surface~~ which reacts with contaminants present in the lamp, said getter material being formed upon thermal decomposition of a getter precursor material during ~~lehring~~ (sintering).

2. (Currently amended) A lamp according to claim 1, wherein said ~~undercoat~~ reflective layer comprises a particulate aluminum oxide ~~having a contiguous layer of and~~ a getter of an oxide of zinc or an alkaline earth metal or zinc or mixtures thereof formed by exposing the particulate aluminum oxide and an effective amount of a precursor of the zinc or alkaline earth metal oxide to during the lehring (sintering) sintering process to ~~an effective amount of a precursor material of an alkaline earth metal oxide or a zinc oxide getter compound.~~

3. (Currently amended) A lamp as claimed in claim 2, wherein said ~~undercoat~~ reflective layer is sintered just prior to the envelope being sealed during manufacture of said lamp.

4. (Currently amended) A lamp as claimed in claim 2, wherein said getter material includes an oxide of zinc or an alkaline earth metal ~~or zinc~~ selected from the group consisting of magnesium, calcium, strontium, barium, ~~zinc~~, and mixtures thereof.

5. (Currently amended) A lamp as claimed in claim 4, wherein said sintered mixture is derived from a soluble precursor compound of the zinc or the ~~the~~ [[an]] alkaline earth metal oxide ~~or zinc oxide~~ or mixtures thereof in an aqueous suspension of aluminum oxide.

6. (Original) A lamp as claimed in claim 4, wherein said getter material is magnesium oxide.

7. (Original) A lamp as claimed in claim 2, wherein said layer of luminescent material comprises a halophosphate phosphor.

8. (Currently amended) A lamp as claimed in claim 7, wherein said getter material includes an oxide of zinc or an alkaline earth metal ~~or zinc~~ selected from the group consisting of magnesium, calcium, strontium, barium, ~~zinc~~, and mixtures thereof.

9. (Currently amended) A lamp as claimed in claim 8, wherein said sintered mixture is derived from a soluble precursor material of zinc oxide or an alkaline earth metal ~~or zinc~~ and mixtures thereof in an aqueous suspension of aluminum oxide.

10. (Currently amended) A lamp according to claim 1, wherein said means for generating ultraviolet radiation ~~is comprised by an arc tube~~ comprises ~~disposed within said lamp envelope, said arc tube including~~ a filling of an ionizable material ~~[[and]]~~, a rare gas and a pair of discharge electrodes between which a discharge takes place during lamp operation.

11. (Currently amended) A lamp according to claim ~~[[1]]~~ 10, wherein ~~said means for generating ultraviolet radiation comprises a filling of an ionizable material and a rare gas within said lamp envelope and a~~ the pair of discharge electrodes are each adjacent a respective sealed end of said discharge vessel.

12. (Currently amended) A low pressure mercury vapor fluorescent lamp, comprising:

- a) a tubular, light transmissive lamp envelope having opposing sealed ends and an inner tubular surface;
- b) a filling of mercury and a rare gas;
- c) a pair of discharge electrodes each arranged at a respective sealed end of said lamp envelope;
- d) means for connecting said discharge electrodes to a source of electric potential outside of said lamp envelope, whereby during lamp operation a gas discharge is maintained between said discharge electrodes, which gas discharge emits ultraviolet radiation;
- e) a first, light transmissive and ultraviolet radiation reflecting layer disposed on said inner surface of said lamp envelope, said first layer ~~comprising~~ consisting essentially of a sintered mixture of an aluminum oxide material and a getter material which reacts with contaminants present in the lamp; and
- f) a second, layer of luminescent material disposed on said first layer.

13. (Currently amended) A lamp as claimed in claim 12, wherein said reflecting layer comprises ~~[[a]] particulate aluminum oxide having a contiguous layer of~~ and an oxide of zinc or an alkaline earth metal or zinc or mixtures thereof formed by ~~exposing the particulate aluminum oxide material during the lehring (sintering) process to an effective amount of an alkaline earth metal or zinc getter compound.~~

14. (Original) A lamp as claimed in claim 12, wherein said reflecting layer is sintered just prior to the envelope being sealed during manufacture of said lamp.

15. (Currently amended) A lamp as claimed in claim 14, wherein said getter material includes an oxide of zinc or an alkaline earth metal or zinc selected from the group consisting of magnesium, calcium, strontium, barium, ~~zinc~~, and mixtures thereof.

16. (Currently amended) A lamp as claimed in claim 15, wherein said sintered mixture is derived from a mixture of a soluble oxide precursor material of zinc oxide or an alkaline earth metal or zinc or mixture thereof in an aqueous suspension of aluminum oxide.

17. (New) A method of manufacturing an electric lamp comprising:
forming an aqueous suspension of a non-fluorescent oxidic material;
adding a water soluble getter precursor to the aqueous suspension to form a mixture;
forming a first coating on the inner wall surface of a lamp envelope with the mixture;
drying the first coating to form a UV light reflective layer;
forming a second coating of a luminescent material over the dry first coating; and
sintering the first and second coatings to induce the water soluble getter precursor to convert into a gettering material.

18. (New) A method as set forth in claim 17, comprising using a water soluble zinc or alkaline earth metal compound as the water soluble getter precursor.

19. (New) A method as set forth in claim 17, comprising using aluminum oxide as the non-fluorescent oxidic material.

20. (New) A method as set forth in claim 17, further comprising sealing the envelope just after the step of sintering.